

EXECUTIVE SUMMARY

MANAGING NORTHERN SPOTTED OWL HABITAT IN DRY FOREST ECOSYSTEMS WORKSHOP SYNTHESIS REPORT

**Report prepared by:
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Executive Summary

The Fish and Wildlife Service in cooperation with the U.S. Forest Service and the Bureau of Land Management, convened a two-day workshop in May 2005, titled “Managing Northern Spotted Owl Habitat in Dry Forest Ecosystems” (Workshop). The Workshop was intended to address the complex issues of forest and fuels management within and adjacent to Northern spotted owl (spotted owl) habitat. The Workshop was directed at dry forest resource specialists (biologists, silviculturist and fuels/fire planners) and land managers from Federal and State agencies, Tribes, non-profit organizations, and educational research facilities.

Decades of fire suppression and timber harvest have resulted in changes to the forest composition and structure that increase the potential for stand-replacing wildfires in areas that had been reserved for late-successional species (including the spotted owl) as part of the Northwest Forest Plan (NWFP). The NWFP recognized that there were areas of the warmer drier physiographic provinces (i.e., the Washington and Oregon Eastern Cascades, the California Cascades and the Oregon and California Klamath Provinces) where active management is necessary to reduce the risk of stand-replacing wildfire and provide for the late-successional forest structure.

Despite provisions in the NWFP to actively manage Late Successional Reserves (LSR) in the dry provinces, active management and implementation of silvicultural and fuels treatments in and adjacent to owl habitat within and outside of LSRs have been minimal or delayed. Primary factors contributing to this delay likely include inadequate funding, competing priorities, potential public controversy, and uncertainty regarding the potential impact of treatments (i.e., positive or negative) on the spotted owl and its habitat. Land management and regulatory agencies recognize and are attempting to address fuels treatment in dry forests. However, it will take much time, planning, financial resources, and interdisciplinary and interagency collaboration to overcome almost a century of effective fire suppression to return the landscape to within its natural range of variability

The importance of late-successional dry forest ecosystems in meeting the recovery and conservation needs of the spotted owl was affirmed in the 2004 release of the Scientific Evaluation of the Status of the Spotted owl (Courtney et al. 2004). The status report also recognized that past fire suppression practices, fuels accumulation, and the trend of forest development in these dry forest ecosystems will continue to increase the risk of habitat loss.

The Workshop was intended as an initial step to address fuels treatment within spotted owl habitat. The Workshop disseminated information on the science related to the potential treatment of spotted owl habitat in dry forest ecosystems and provided interactive exercises to engage participants in discussion. Both researchers and those involved with land management responsibilities presented applied research and case studies of silvicultural and fuel treatments within dry forest habitats. Objectives of the Workshop were to: 1) enhance the science – management dialogue; 2) improve future forest management in the dry forest provinces based on the Workshop discussions; and 3) produce information for a synthesis report that includes recommendations for use by the Federal agencies.

The Workshop was well attended by over 100 participants representing multiple disciplines from across the Northwest. These participants provided valuable information and recommendations

based on their experience with this complex issue in their geographic area. The synthesis report attempts to condense this information into core issues with recommendations. It was the overwhelming view of participants, that *No Action Is Not An Option*.

Recommendations

1. **No action is not an option; we must continue to move forward.** Spotted owl habitat is at risk and declining within dry forests due to high fuel loads, mortality associated with insects and disease, and stand-replacing fire events. Silvicultural treatments of fuel loads are necessary to conserve spotted owl habitat and to achieve overall forest health objectives. Although there is uncertainty and potential risk to spotted owl habitat from the effects of treatments, there is likely a greater risk of a stand-replacing fire in dry forest habitat where silvicultural treatments are not implemented. A natural fire regime across the landscape should be restored to manage for late-successional forests. The participants indicated that they need to have guidance on where and how to design their projects to fit into the broader context of spotted owl recovery.

2. **Convene a recovery team to develop a spotted owl recovery plan.** The need for a spotted owl recovery plan was one of the most cited recommendations from Workshop participants. A spotted owl recovery plan would provide specific objectives, goals, and tasks to support the design, implementation and prioritization of dry forest restoration and maintenance of spotted owl habitat.

3. **Establish interagency provincial teams with the role of setting a provincial context for where fuel reductions would facilitate maintenance and restoration of spotted owl habitat.** A Regional Core Team should be assembled and consist of a wildlife biologist from the Forest Service, Bureau of Land Management, and the Fish and Wildlife Service, a silviculturist and fuels planner from both the Forest Service and the Bureau of Land Management, a representative of the States of Oregon and Washington's Forestry Departments and a GIS specialist. The Regional Core Team would coordinate with local Forest and District level interagency teams comprised of owl biologists, silviculturalists, and fuels planners. Tribal governments should be invited to participate in the Interagency Teams. The teams could utilize existing local spatial data and NWFP monitoring report data to develop provincial-scale maps that identify priority areas for maintaining and restoring spotted owl habitat. In addition to producing the provincial-scale maps, the teams could establish general silvicultural practices that promote owl habitat development for the respective provinces.

4. **Establish interagency Forest/BLM District level teams to prioritize where to protect existing owl habitat and cores, restore areas most likely to sustain owl habitat, and enhance existing owl habitat through the use of silvicultural and fuels treatments.** This prioritization effort, conducted at the Forest and smaller scales (District and watershed), would facilitate planning and implementation of fuel treatments across the landscape. Additionally, this effort could contribute to and complement the provincial-scale efforts.

5. **Implement interagency planning for projects.** Interdisciplinary teams and out-year planning teams need to be interagency and include the participation of the Fish and Wildlife Service in early project planning and development.

6. Manage for long-term sustainability of owl habitat regardless of land use allocation. Manage forest types (e.g., mixed wet conifer) with the highest sustainability for spotted owl habitat regardless of the land use allocation boundaries. Manage dry forest types (e.g., Ponderosa pine) to allow for low severity fire.

7. Conduct pilot treatment projects. Pilot projects should be implemented with specific objectives to treat and protect in and adjacent to spotted owl habitat. Design pilot projects cooperatively with the Pacific Northwest Research Station (PNW) community and the NWFP Interagency Regional Monitoring Team utilizing an adaptive management framework. Pre, during, and post project monitoring is an essential component to evaluating the effectiveness of treatments. Monitoring of pilot projects may help answer key questions such as: 1) what is spotted owl use pre and post treatment; 2) what is prey availability pre and post treatment; 3) what are the effects of different treatment options; and 4) at what scale should the treatments be applied?

8. Conduct up-to-date surveys and assess habitat conditions for the spotted owl. Workshop participants indicated that there was a need for up-to-date spotted owl surveys and habitat information to: 1) track spotted owl response pre and post treatment; 2) prioritize habitat restoration treatments; 3) facilitate project planning; 4) track spotted owl response where habitat is affected by insects, disease and wildfire; and 5) conduct Section 7 consultation.

9. Dedicate funding resources to treatment of habitat outside of the Wildland Urban Interface (WUIs) areas. It was often cited at the Workshop that the WUIs were the only areas being funded for treatment. However, a large proportion of forest area outside of the WUI is in need of treatment to lower the fire severity risk. There should be a focus on fuels treatments toward a desired future dynamic, not necessarily condition. It is recommended that monetary resources be allocated to treat forested areas beyond WUIs to restore the historic range of variability. Additionally, it was suggested that a performance credit system be developed for project implementation in the more difficult and costly treatment areas.

10. Conduct additional and more frequent workshops on managing dry forest ecosystems within the NWFP area. Suggested topics for these workshops included but are not limited to: 1) restoration treatments for spotted owl habitat; 2) application of NWFP management direction for fire-prone dry forests; and, 3) managing for owl prey in dry forests (e.g., the development of silvicultural prescriptions).

11. Facilitate information exchange, education and public involvement. Given the potentially controversial nature of treatments within LSRs and owl habitat it was recommended that early involvement of the public occur in the project development phases. Additional time conducting outreach with stakeholder groups to develop communication, trust, and hopefully concurrence, in advance of project implementation would be beneficial.

12. Review and establish local spotted owl habitat definitions. Spotted owl habitat is naturally variable in composition and structure in dry forest areas. Because of this natural variability and based on information within the SEI Report (Chapter 5: Habitat Associations), administrative units should review their local spotted owl habitat definitions to see if new information indicates a change should occur in their local definitions of spotted owl habitat.

Additionally, biologists and silviculturists should work together to define owl habitat in silvicultural terms to facilitate implementation of treatments that benefit spotted owl.

13. The Forest Service, BLM and Fish and Wildlife Service should evaluate and make recommendations on the potential use of the NWFP BIOMapper to map suitable owl habitat in dry forests ecosystems. The SEI report indicated there was an information need to establish a range-wide, spatially explicit database to track changes in spotted owl habitat related to management activities and natural disturbance. During the Workshop, habitat maps from the NWFP Northern spotted owl monitoring module were briefly presented. Although a specific recommendation was not made during the Workshop, there was a discussion pertaining to the potential use of BIOMapper to develop consistent spotted owl habitat baseline maps for tracking habitat at a large scale. The NWFP monitoring module would provide valuable information for Provincial Assessments. However, the accuracy of the module in identifying spotted owl habitat in the dry forests must be evaluated through a comparison with existing habitat baselines.

14. Address Key Research Questions. Workshop participants generated a broad list of research questions with the most frequently mentioned research needs listed below. The need to conduct research on the complex interactions of spotted owl prey and habitat treatments was a frequent comment.

- What is the post-fire habitat recovery for dry forests and owls? Conduct a retrospective study.
- Address the barred owl issue (interactions study, controlled removal, examine existing data).
- How should we promote nesting, roosting and foraging (NRF) components (e.g., snags, downed wood, etc)?
- What prescriptions should we be using in treating NRF?
- How do owls respond to treatments?
- How do prey respond to treatments?
- What is the historic range of variability (HRV) or desired future condition we should manage for?
- How should we develop prey habitat?
- How should we be prioritizing treatments and maintaining existing habitat?
- How can stand exams of existing owl habitat be used to promote development of suitable habitat for the owl through silvicultural prescriptions?